

FIGURE 1

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Peptide	Amino acid sequence
1	DNTAQTSAYIQYEPHHSI
2	GPGHWDR
3	AAFDGSGQR
4	FAMGALPD
5	FTASLDEWTTAAR
6	VDASFRPQGXLAP

FIGURE 2

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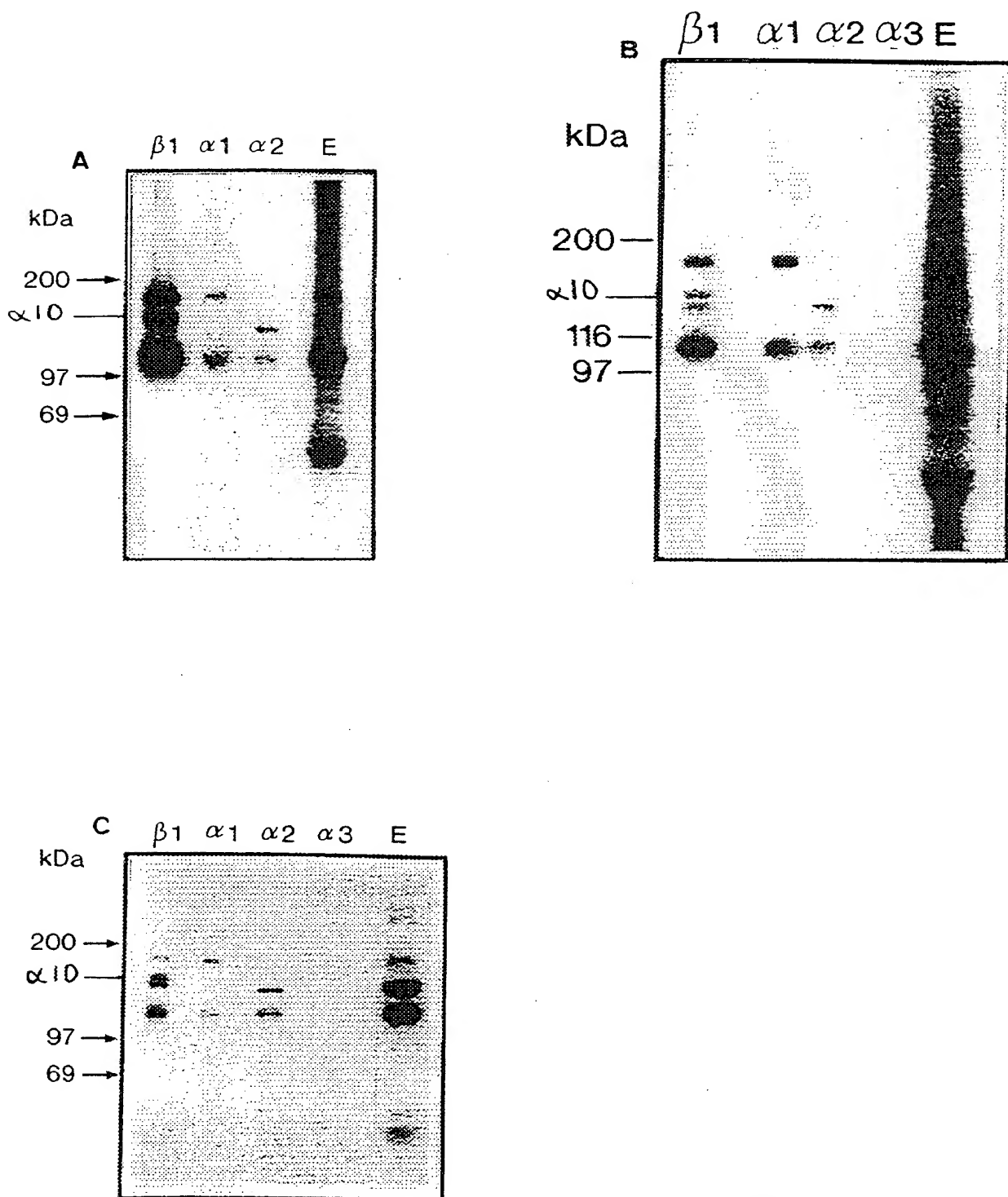


FIGURE 3

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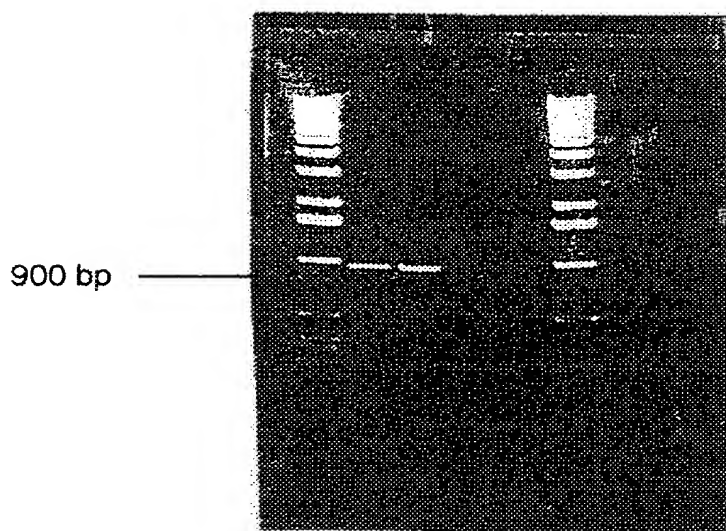


FIGURE 4

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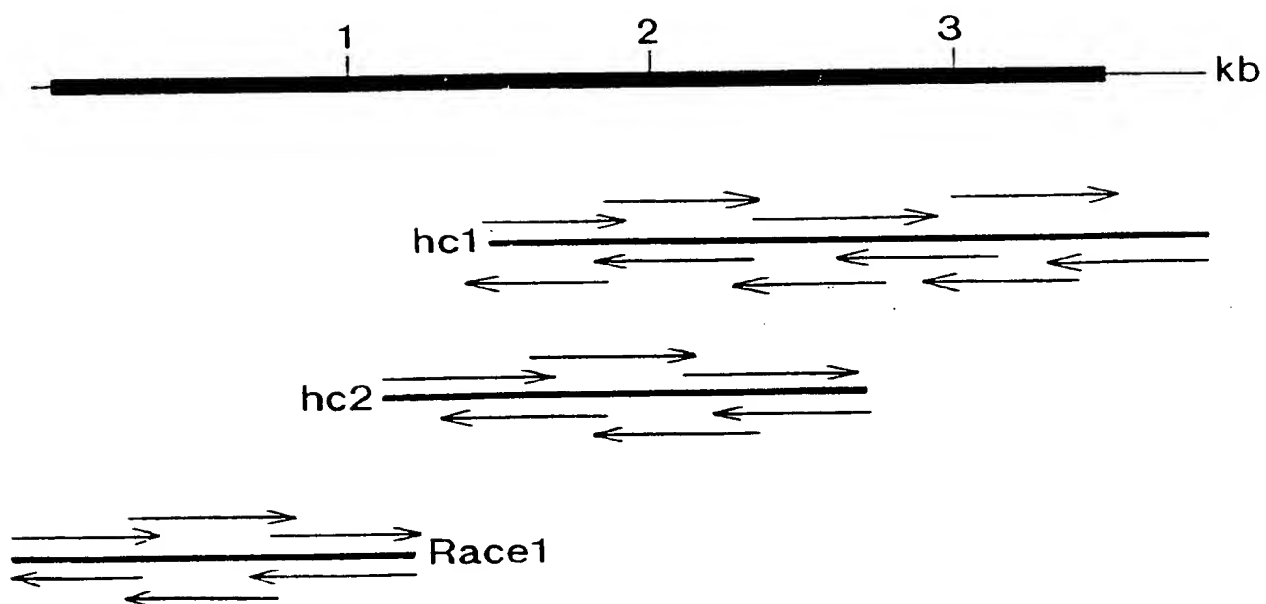


FIGURE 5

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CAGGTGAGAAACGATCAGGATGGAACCTCCCTGCTCACTACCTGTCTTCCCTGTGTTCTCTGACA 72
 M E L P F V T H L F L P L V F L T -6
 GGTCTCTGCTCCCTTTACCTGGATGAACATCAACCAGGCTATCCAGGGCCACCAAGCTGAATTT 144
 G L C S P F N L D E N H P R L F P G P P E A E P 19
 GGATACAGTGTCTTACACATGTTGGGGGTGGACAGCATGGATGCTGGTGGGGCCCTCCGGATGGGCT 216
 G Y S V L Q H V G G G Q R M H L V C A P W D G P 43
 TCAGGCGACGGAGGGGGAGCTTTATCGCTGCCCTGTAGGGGGGGCCCAATGCCCATGTGCAAGGGC 288
 S G D R R G D V Y R C P V G G A H N A P C A K G 67
 CACTTAGTGACTCACTGGGAATTCATCTCATCTGCTGTAATGACCTGGGATGCTCTGTGTA 360
 H L G D Y Q L G N S S H P A V M H H L G H S L L 91
 GAGACAGTGGTATGGGGATTCATGCTGTGCTGCTCTCTGCTGCTGCTGTGGAGCTGTCTCTTC 432
 E T D G D G G F M A C A P L W S R A C G S S V F 115
 AGTTCTGGATATGCTGCTGTGGATGCTTCACTTCAGGCTCAGGGAAGCTGGCACTGCTCCACG 504
 S S G I C A R V D A S F O P Q G S L A P T A Q R 139
 TCCCAACATACATGGATGTTGTTCTCTGGATGGCTGCAACAGCATCTACCTGCTGAATCTCAG 576
 C N P T V D V I V L D G S N S I Y P M S E V Q 163
 ACCTTCTACGAAGCTGGTAGGAACTGTTTATTGACCCAGAACAGATACAGTGGGATGTCAGAT 648
 T F L R R L V G K L F I D P E Q I Q V G L V Q Y 187
 GGGGAGGCTGTATACAGTGGTCTGCTGGAGATTCGCAAGGAGGAGGAGTGGTGGAGGAGCAAG 720
 G E S P V H E M S L G D F R T K E E V V R A A K 211
 AACCTCAGTGGGCGGAGGAGGAGAACAAAGATGCCCAAGCAATATGCTGCTGACAGAGGGTTC 792
 N L S R R E G R E T K T A Q A I M V A C T E G F 235
 AGTCAGTCCATGGGGCGGAGGCTGGCAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 864
 S Q T S H G R P E A A R L L V V T K E E V V R A A K 259
 GGAGAGGCTCTCTGAGCACTAAGGCTGTGAGGCTGGAGAGTGAACGCTAGGATTCAGCTCTTC 936
 G E E L P A A L K A C E A G R V T R Y G I A V L 283
 GGTCACTACTCCGGGGCGGAGGAGTCCAGCTCTCTCTGAGAGAAATAGCAATTTGCACTGATCCA 1008
 G H Y L R R R O D P C S I F R E I R T I A S D P 307
 CATGAGGCTCTCTCTCAATGCAAGATGAGGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1080
 D E R F F F F V T D E A A L T D I V D A L G D R 331
 ATTTTGGCTTGAAGGCTCCATGCAAGAAACGAAGCTCTCTTGGCTGGAATGCTCAGATTTGGTTTC 1152
 I F G L E G S H A E M E S S F G L E M S Q I G F 355
 TCCACTCAGCTTAAGGATGGGATTTCTTTGGGATGCTGGGGCTTACTGCTGGGAGGCTCTGCTGA 1224
 S T H R L K D G I L F G H V G A Y D W G G S V L 379
 TGCTTGAAGGAGCCACCTTTTC CCCC CACGAATGGCAGTGAAGACGAGTCCCTCCCTGCACTGAG 1296
 V L E G G H R L F P P R M A L E D E F P P A L Q 403
 AACATGCAAGCTACTGGTACTCTGTTCTTCATGCTTTTGGGGGTGAGCGCCCTGTTCTCTCT 1368
 M H A A Y L G Y S V S S M L L R G G R R L F L S 427
 GGGCTCTCGATTAGACATGGAGAAAGTCACTGCCCTTCAAGCTTAAGAAAGATGGGCTGTGAGGGT 1440
 G A P R P R H R G K V I A F O L K K D G A V R V 451
 GCCAGAGCTCTCAGGGGAGGAGATGTTTATCTTTGGAGTGAAGCTGCTGCCATGGATACAGATAG 1512
 A O S L Q G E Q I G S Y F G S E L C P L D T D R 475
 GATGGAGCACTGATGCTTACTTGTGGTCCCTCCATGCTTGGAGCCGAGCAAGGAAACAGGAGCT 1584
 D G T T D V L L V A A P H F L G P Q N K E T G R 499
 GTTATGTGTATCTGTAGGCGAGAGCTCTGCTGAGCTTCAAGCAACCTCAGGAGAGCCCTCCAG 1656
 V Y V Y L V G Q D S L L T L O G T L Q P E P P Q 523
 GATGCTGCTTGGCTTTGGCATGGAGCTTCTCTGATGAGCAAGATGTTTGTCTGATGCTGCTG 1728
 D A R F C F A N G A L P D L W D G F A D V A V 547
 GGGGCGCTCTGGAAGATGGGAGGAGGAGCTGACTGTACCATGGAACCGAGCTGGAGTGGGCCCC 1800
 G A P L E D G H Q G A L Y L Y H G T O S G V R P 571

CATCTGCCAGAGGATGGTGGTGGCTGCTCATGCCACATGCCCTCAGCTACTTTGGCGAAGTGGATGGT 1872
 H P A O R I A A A S M P H A L S Y F G R S V D G 595
 CGGCTAGATCTGGATGGAGATGATCTGGTGGATGGCTGTGGGTGCCAGGGGGGAGGCTGCTGCTGAG 1944
 R L D L D G D D L V D V A V G A Q G A A I L L S 619
 TCCGGCCCATTTGCTCATCTGACCCCATCTGAGGAGTGAACCCAGAGGCGCATGCTGTCTGAGGGGAC 2016
 S R P I V H L T P S L E V T P O A I S V V O R D 643
 TGTAGGCGGAGGCGAGGAGGAGTGTCTGACTGACGCCCTTGTCTCAAGTGACCTCCGCTACTCT 2088
 C R R R G Q E A V C L T A A L C F Q V T S R T P 667
 GGTGCTGGGATCACTTCTACATGAGGTTCACTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2106
 G R M D H Q F Y M R F T A S L D E M T A G A R A 691
 GCATTTGATGGCTCTGGCCAGAGCTTGTCCCTCGGAGGCTCCGCTCAGTGTGGGAAATGCTCACTGTGAG 2232
 A F D G S G Q R L S P R R L R L S V G M V T C E 715
 CAGCTACACTTCCATGCTGGATACATCAGATTACCTCCGCGAGTGGCTTCTGCTGACCTTTGCTTGTG 2304
 Q L H F H V L D T S D Y L R P V A L T V T F A L 739
 GACAATCTACAAGGAGGAGGCTGTGCTGAATGAGGCTGACCCCTCTATACAAAGCTGCTGCTGCTT 2376
 D H T T K P G P V L N E G S P T S I C K L V F F 763
 TCAAAAGATTTGGCTGCAAAAGTGAATGCTGACAGAGCTGCTGCTCAAGTGAATATGACATCAGAGGC 2448
 S K D C G P D N E C V T D L V L Q V N M D I R G 787
 TCCAGGAGGCGCCCTTGTGCTGAGGCTGCGCGGAGGAGTGTGCTATCACTCTGAGAGAGAGA 2520
 S R K A P F V V R G G R R K V L S V T L E M R 811
 AGGAAATGCTTACAAAGAGCTGAGTATCTTCTAGAACTCTCAGCTGGCAGTCTCACTCT 2592
 K E N A Y M T S L S I I F S R M L H L A S L T P 835
 CAGAGAG 2664
 S R K A P F V V R G G R R K V L S V T L E M R 859
 CCTGCTTCCAGAGTGGAGCAAGGTGACCTTCTGCTAGAGTTTGAATTAAGTCTGCTCTCTCTGCTGAG 2736
 P V F T T G A K V T F L L E F E F S C S S L L S 883
 CAGCTTCTGGAGGCTGACTGCGAGGAGTGAAGCTGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2808
 Q V F G K L T A S S D S L E R M L Q L E N T A 907
 CAGAGCTCAGCTACATCCATATGAGCCGAGCTCTCTGCTGCTGAGTCTGCTGCTGCTGCTGCTGCT 2880
 Q T S A Y I Q Y E P H L L F S S E S T L H R Y E 931
 GTTCACTCATATGGAGCCTTCCAGTGGCTCTGGCGAGGAGTCAAAAGCTCTCAGGCTTCAAGAGCTA 2952
 V H P Y G T L P V G P G P E F K T T L R V O N L 955
 GGTGCTATGTTGGTGGCTGCTCATCTCAGCCCTCTCTCAGCTGTGGCCCATGGGGCAATTTCTT 3024
 G C Y V V S G L I I S A L L P A V A H G G N Y T 979
 CTATCATGCTCTAGTCACTACAAATGCAAGCTGATATGCAAGAGCTGACTGACCCGAGGAGGAG 3096
 L S L S Q V I T W H A S C I V O N L T E P P G P 1003
 CCTGTGATCAGAGGAGCTTCAACAGCAAGAGAGTGAATGGAGAGCAATCTCAGTGTGAGTGTGAGG 3168
 P V H P E E L Q H T M R L M G S N T Q C Q V V R 1027
 TGCACCTTGGGAGCTGGCAAGGAGGAGTGAAGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3240
 C H L G Q L A K G T E V S V G L L R L V H N E P 1051
 TTCGAGAGGAGGAGTCAAGTCCCTGAGGCTGCTGAGGAGCTTTCAGCTGGGAGGAGGAGGAGGAGGAG 3312
 F R R A K F K S L T V V S T F E L G T E E G S V 1075
 CTACAGCTGACTGAAGCTCCCTGCTGAGTGAAGGCTTTCAGGCTGCTGCTGCTGCTGCTGCTGCTGCT 3384
 L O L T E A S R M S E S L L E V V Q T R P I L I 1099
 TCCCTGTGGATCTCATAGGAGTGTCTGGAGGAGTGTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3456
 S L W I L I G S V L G G L L L L A L L V F C L W 1123
 AGCTTGGCTTCTTCCATAGGAAATCTCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3528
 K L G F P A H K K I P E B E K R E E R L E O 1145
 TACAATAGGCTTGAAGAGTCTCTGCTGCTGCTTCTTGAAGAGCTTGAATGAAGAGGAGGAGGAGGAG 3600
 GCTCAGATGGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3672
 AGGAGTGTCTGCTGCTGAGAGTGAAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3744
 CAGCTCTGCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 3816
 TATCCGAGGAGTGAATATATTTTGGCTAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 3884

FIGURE 6

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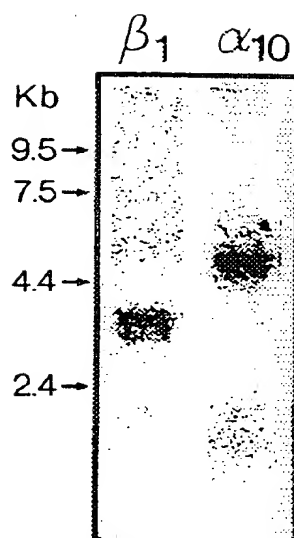
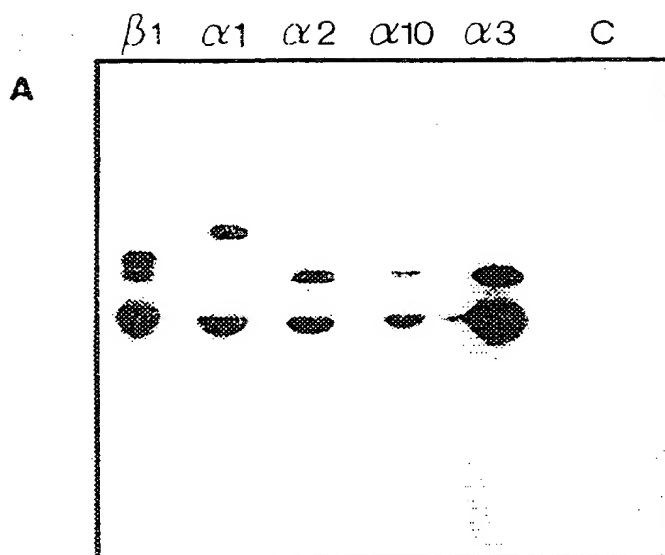


FIGURE 7

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B IP: $\alpha 10$ $\beta 1$
 Blot: $\beta 1$ $\beta 1$

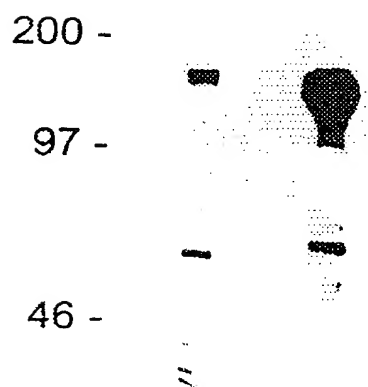


FIGURE 8

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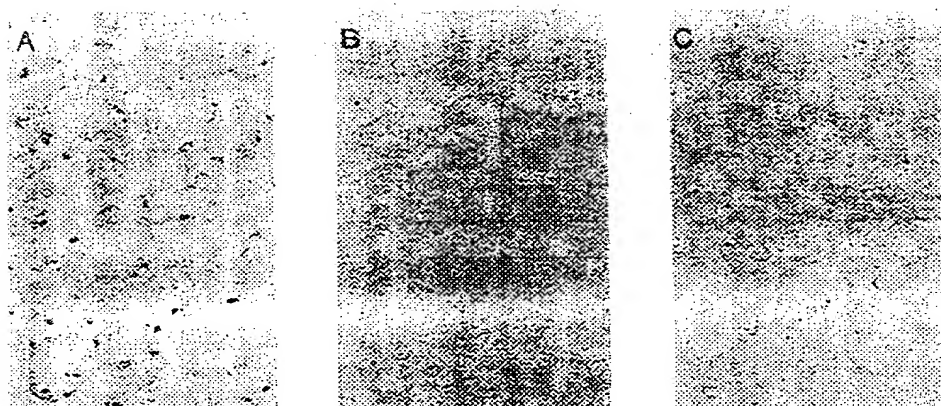


FIGURE 9

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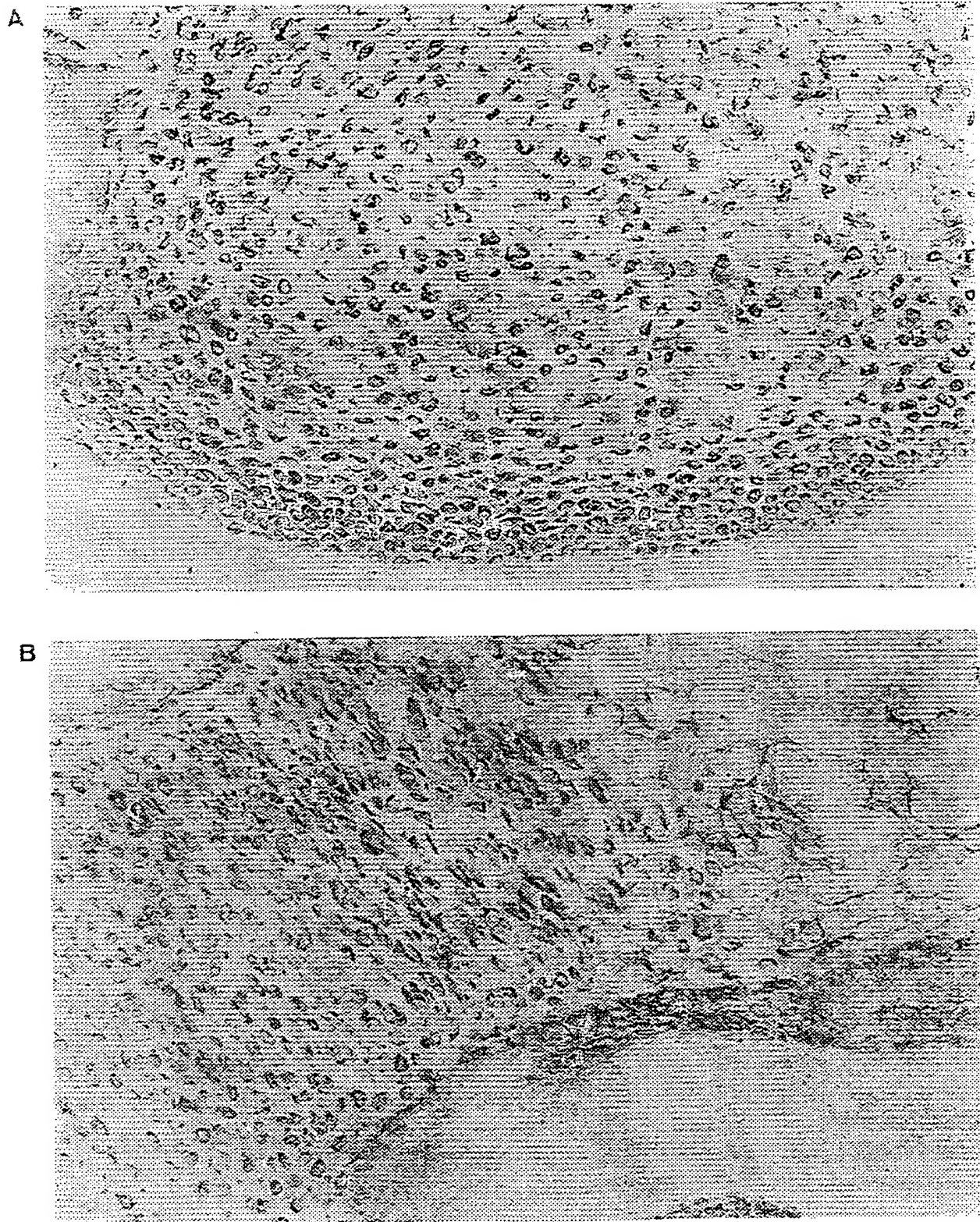
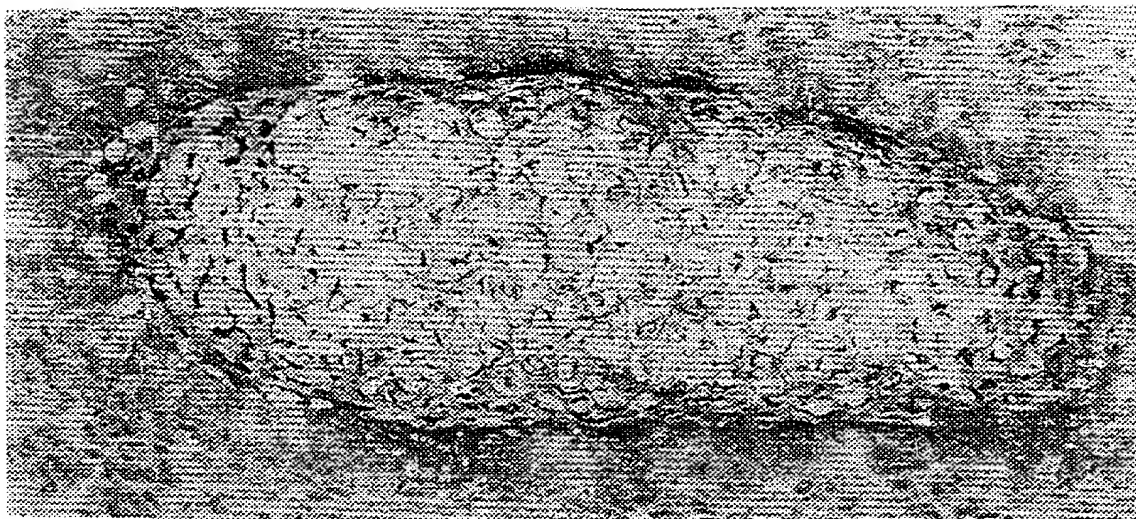


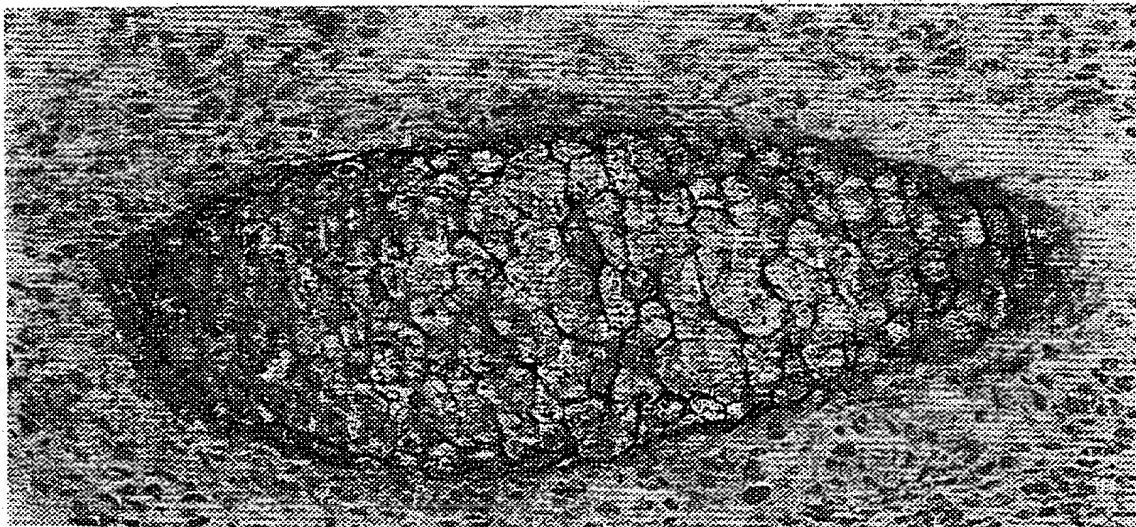
FIGURE 10

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A



B



C

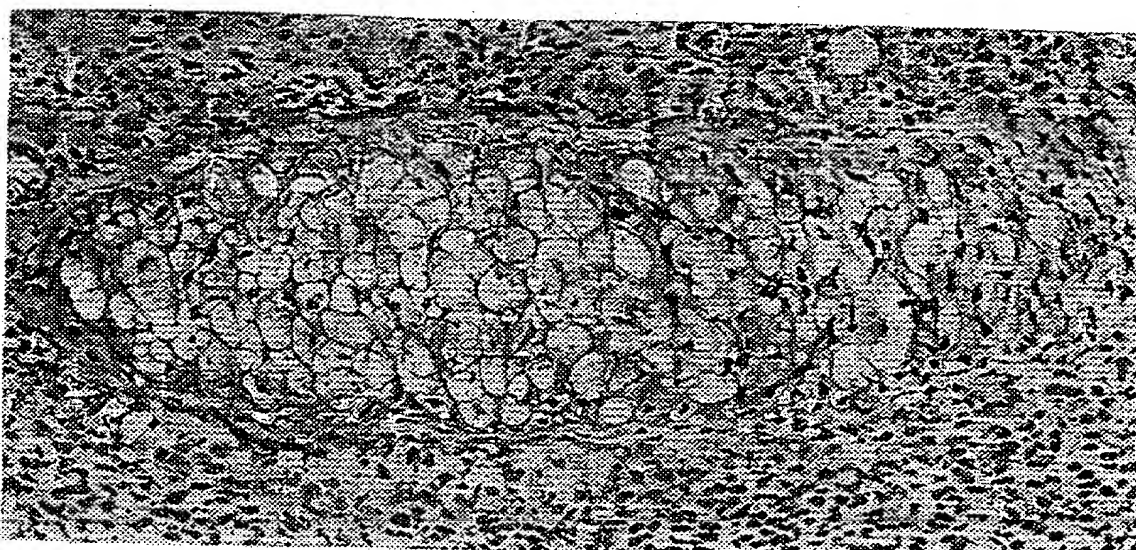


FIGURE 11

005207 11521500

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Human RNA Master blot

Tissue	$\alpha 10$ expression	Tissue	$\alpha 10$ expression
Aorta	++++	Thyroid gland	-
Trachea	+	Salivary gland	-
Lung	++	Spleen	-
Fetal lung	++	Fetal spleen	-
Kidney	++	Thymus	-
Fetal kidney	(+)	Fetal thymus	-
Heart	(+)	Peripheral leucocyte	-
Fetal heart	++	Lymph node	-
Spinal cord	++	Appendix	-
Mammary gland	(+)	Placenta	-
Bone marrow	(+)	Whole brain	-
Small intestine	(+)	Fetal brain	-
Skeletal muscle	-	Amygdala	-
Liver	-	Caudate nucleus	-
Fetal liver	-	Cerebellum	-
Colon	-	Cerebral cortex	-
Bladder	-	Frontal lobe	-
Uterus	-	Hippocampus	-
Prostate	-	Medulla oblongata	-
Stomach	-	Occipital lobe	-
Testis	-	Putamen	-
Ovary	-	Substantia nigra	-
Pancreas	-	Temporal lobe	-
Pituitary gland	-	Thalamus	-
Adrenal gland	-	Subthalamic nucleus	-

FIGURE 12

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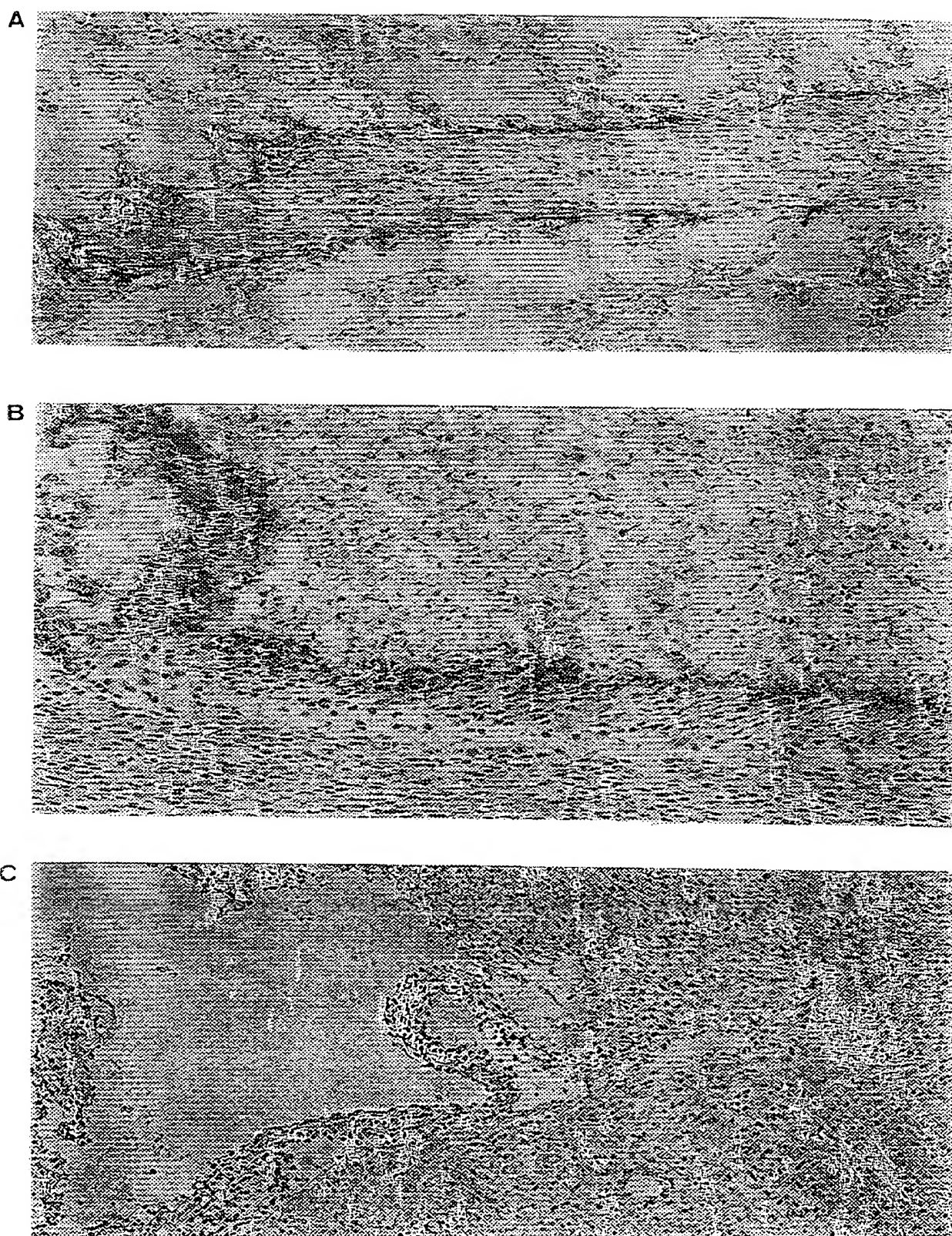


FIGURE 13

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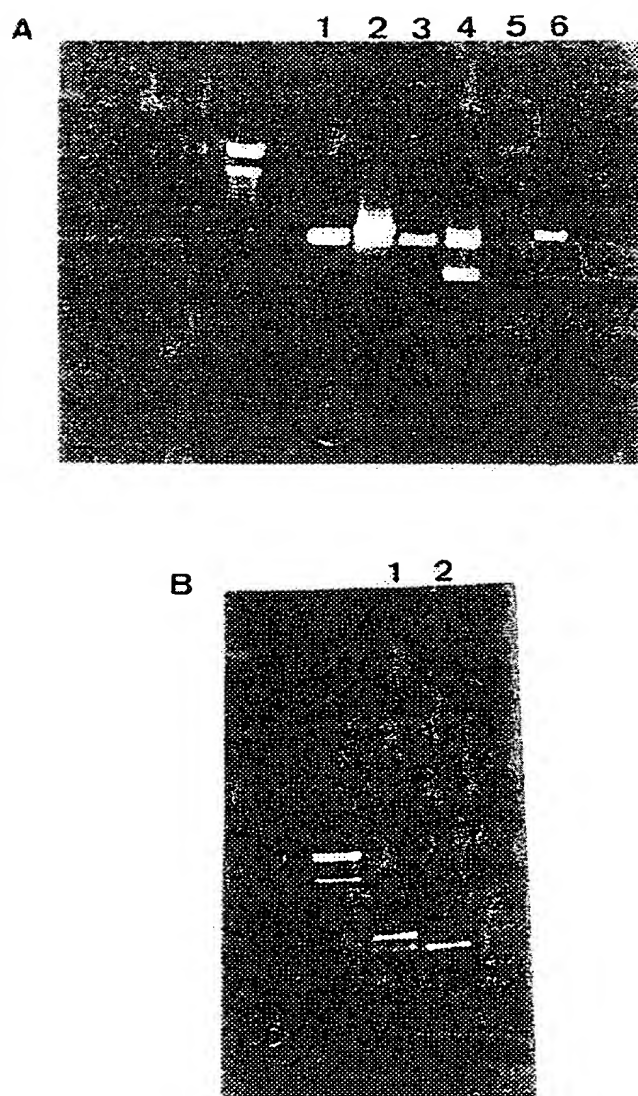


FIGURE 14

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TGNTHMMKCMCAGAKMGWSAKGNCCGAKGGTCKGKGVAAVGTGACARAGCTNGMNAARANGAAGTATGACCCWGTGGGC 80
 ? ? ? ? R ? ? ? P ? V ? ? ? D ? A ? ? K ? K Y D ? W A
 V ? ? ? H ? ? ? ? R ? ? ? ? V T ? ? L ? K ? ? S M T ? G
 ? ? ? ? T ? ? ? ? ? G ? ? ? ? . Q S ? ? K ? E V . P V G
 CRAGATAGMKAMDAAGCNGHSAGKTRAHGGACGATGGNCCGCGCAAVOGABWGGNAHTBCGGCNWDCCARNGTCCAAATK 160
 ? I ? ? K ? ? ? ? G R W ? ? Q ? ? G ? ? G ? Q ? P N
 P R . ? ? ? S ? ? ? ? D D G P A ? R ? ? ? ? A ? ? ? V Q ?
 ? D ? ? ? ? A ? ? ? . R T M ? ? P ? ? ? ? ? R ? ? ? ? S K ?
 SANKTCSAGGAACCMACGGANTGGCTCGCARCCCDTAGGGATCAGGKACGATGRCCTSCCGRNSKACTCSGNKGTGATWA 240
 ? ? ? R N ? R ? G S Q P ? G I R ? D ? S P ? ? S ? . ?
 ? ? ? G T ? G ? A R ? P . G S G T M ? ? R ? ? T ? ? D ?
 ? S Q E P T ? W L A ? ? R D Q ? R ? L ? ? ? L ? ? ? I
 ATCGMNGTMMGGMAGGCGGHHGAATTRWAAAGTANTGGTHGAMAKATGWMVGGAWATGATRRGTMGACTVTHVMGGVAK 320
 I ? ? ? R ? A ? E L ? S ? G R ? M ? R ? . ? V D ? ? G ?
 S ? ? V G R R R N ? K V ? V ? ? ? ? ? G ? ? D ? ? T ? ?
 N R ? ? ? ? G G G I ? K ? W ? ? ? ? ? ? ? M ? ? R L ? ? R ?
 VTAKSGGTACAGGCGAAGACARGRAKGTGTCTGAGGAADTCAGNAGGACAAMHTTCCCGAAGTCHGGACTTAGKATRGAT 400
 ? ? ? Y R R ? Q ? ? ? V . G ? ? D ? ? A E V R T . ? ?
 ? ? ? G T G E ? ? ? ? V S E E ? ? R T ? L P K S G L ? ? D
 ? ? ? V Q A ? T ? ? C L R ? ? S ? G Q ? C R S ? D L ? ? I
 ACGAANCKTRGATCTTAMADGGGGGNKAGCGAGTGCGSTAAACGVARATRGGNSWGTCTACTTMAACNCCAAGNGDGGACA 480
 Y E ? ? I L ? G G ? R V ? K R ? ? ? ? ? L L ? ? Q ? ? T
 T ? ? ? S ? ? G ? S E C ? N ? ? ? ? ? V Y ? N ? K ? G H
 R ? ? ? D L ? ? G ? A S A . T ? ? ? G ? S T ? T P ? ? D
 TTTACTAGASGAGGAGAGTAGCCAGATCAGDTGAGATGATCTAAKGTGGGGTCCCGTTGCCAGTATATGAGAGGACTGGT 560
 F T R ? G E . P D H ? R . S ? V G S R C Q Y M R G L V
 L L ? ? E E S S Q I T . D D L ? W G P V A S I . E D W
 I Y . ? R R V A R ? ? E M I . ? G V P L P V Y E R T G
 TCGGCAGACATWGATGCTCTTTGCTGACTCACATATTGTTGCCVTGAGKATGATCAGATACGATCTGWTGTCCCTCATCA 640
 R Q T ? M L F A D S H I V A ? ? M I R Y D L ? S L I
 F G R H ? C S L L T H I L L P . ? . S D T I ? C P S S
 S A D I D A L C . L T Y C C ? E ? D Q I R S ? V P H H
 TGAATSTGRGCCGTGATGCTAATGAGATTCCGCTATGATGGAACAAGAGACTTMTGCTACAGCAGGCGAATGAAGGTTTC 720
 M N ? ? ? R D A N E I R L . W N K R L ? L Q O A N E G F
 . ? ? ? A V M R F A Y D G N T R D ? C Y S R R M K V F
 E ? ? ? P . C . . D S P M M E Q E T ? A T A G E . R F
 TAGAGTAGGAGTCTCAGGAGGAGAGAACTGTGGACCTGGAGGACCAGGGACTCCAGGAGGAAGTGGCCACAGTGGCTT 800
 . S R S L R R R E T V D L E D O G L O E E V A T T G L
 R V G V S G E K L W T W R T R D S R R K ? P O L A
 L E . E S Q E E R N C G P G G P G T P G G S ? H N W L
 GMAGTTTCCGCTCCGATCCTGATACWGGCTCGTCCCTTVGAGTTATCCCCCTCTCTTGCTGGATGGCTCAGAAATGCCCTGG 880
 ? F R L R S . Y ? L V L ? V I P L S C W M A Q K C L
 ? S F G S D P D T G S S ? E L S P S L A G W L R N A W
 ? V S A P I ? A R P ? S Y P P L L L L D G S E M P G
 ACCTTTTCATCCCCACTGGACAAACTAGGCGTCTGGCGTGTGGCCCTGGGATTGTGGGGCTGTGTGGCCCTCATATCCTC 960
 D L F I P T G Q T R R L A L W P W D C G A V W P H I L
 T F S S P L D K L G V W R C G P G I V G L C G L I S S
 P F H P H W T N . A S G V V A L G L W G C V A S Y P
 CATCTGTCTATTCTCACCCTAATCTGTCCCTGGNTACGACTCAAGCCCYGACTGACAMTGTGGTACAAGATAAGGAGGG 1040
 H S V Y S H P N L S L ? T T Q A ? T D ? V V Q D K E G
 I L S I L T L I C P W ? R L K P ? L T ? W Y K I R R
 P F C L F S P . S V P G Y D S S P D . ? C G T R . G G
 AGCCCCAGGTGGGTGAGATGGAAGCTGAGATGGTNCACCTGTGTGCCMACCTCATTTGTAATCAACTNCCTTGACTGAAGTT 1120
 A O V G E M E A E M V H C V P T S L . F N ? L D . S
 E P R W V R W K L R W ? T V C ? P H C N S T ? L T E V
 S P G G . D G S . D G ? L C A ? L I V I Q L P . L K L
 AAAATCCAGATCCYTACGGATGAGGGGAAGAACCTGCCAAGACGGGTGAGGAAGGCAGTGCTAAGGGGAAGGCTCCTGCA 1200
 . N P D P . G . G E E P A K D G S G R Q C . G K A P A
 K I Q I ? R D E G K N L P K T G Q E G S A K G R L L Q
 K S R L G M R G R T C Q R R V R K A V L R E G S C
 GGCCTCTGCGAGTTGGACTTCATTGAGTCCCATTCGCCAGAAATCTCATAGCTCTTCCCYTATCTCTCTGTCTTGAGTCTAG 1280
 G L C S W T S F S P I A R I S . L F P L S L C L E S S
 A S A V G L H S V P L P E S H I S S S ? Y L S V L S L
 R P L Q L D F I S H C Q N L I A L P ? I S L S . V .
 TTAAGAATTTGTTACCGAGACAGAATTCTCTTTCTTAGCCCTCCTGGCCAGATATTTAAAGGAGGGGGGTGGGTACTT 1360
 . E F V T G D R I L F L S L L A R Y L K G G G W V T
 V K N L L P E T E F S F L A S W P D I . K E G G G L L
 L R I C Y R R Q N S L S . P P G Q I F K R R G V G Y F

FIGURE 15a

TTTGCTAGGGGAAGCTTAAGTTATGGATAGCAAAAGTGCTAAATGTATCTTTTCTGAAACCTCATGCTAGGCAATTTTC 1440
F W . G K L K L W I A K C . I Y S F F L K P H V A F F
F G H G S L S Y G . Q S A C I L F F . N L M . H P S
L V G E A . V M D S K V L I V F F F S E T S C S I F
TTCCTTCACACCTCCATACTTCCAGGCTTCATTTCATGCCCGGCTCTCTTCGCTCACACCGCTGCAGGCTGTTTGA 1520
F P S T L H T F P G F I S C P A S L R S H R C R L F E
S L P P S I L S Q A S F H A R R L F A H T A A G C L
L P F H P P Y F P R L H F M P G V S S L T P L Q A V .
GGCTTCCTCCCTGGGTCTGCCTCAGCAGACTGCCTCCACACTTCCAGTTTCTGCGTACACGTTGATATTAGAGTTTCT 1600
A L S P L W G L P Q Q T A S T L F S S F C V H V D I R V S
R L L P L V C L S R R L P H F P V S A Y V L I L E F P
G F S P G S A S A D C L H T F P V L R T R . Y . S F L
TCCCACTTGGCTCTTGCTCTTCTCTGACTACCCAGGCTGATGCCATGCTGGCCTCTTCTGTAACTACTGTAGAATG 1680
F P T W L L L L F L . L P R L M F C L A S S C K Y C T M
S P L G S C S F S D Y P G . C H V W P L P V N T V Q .
S P H L A L A L S L T T Q A D A M S G L F L . I L Y N
ATTCTATGTAAATAACTGGTCTCTTGCCACAGAGCAAGCAAGCCTTCTAGGCTAACAAATTAAGATCAAGTTTGCTCAC 1760
I L C K N . L V L A H R A S K P S R L T N . R S S L L T
F Y V N N W S L P T E Q A S L L G . Q I K D Q V C H
D S M . I T G F C P Q S K Q A F . A N K L K I K F A H
TGACTTTTTATTCAATTCAAGATGGCTGGGGGTGGGGTGGGGGGGGGATTGCCTGTTTTCACTGTGGTACCTAGGCAG 1840
D F F L I Q F K M A G G G V G G G R I A C F H C G T . A
L T F L F N S R W R G V G W G G G L P V F T V V P R Q
L F Y S I Q D G G G W G G G A D C L F S L W Y L G R
GGCTGAAGCTCTGAGCTCCCTGCTTTAGGCTTCTGAGTAGCCTACAGTGAGTGTTACTGTGTCCAGCTGCTCGTTGACA 1920
G L K L . A P L L . A S E . P T V S V T V S S C S L T
G . S S E L P C F R L L S S L Q . V L L C P A A R . H
A E A I S S P A L G F . V A Y S E C Y C V Q L L V D
TCTGGTCTCTCATGGTCTGGTTCATTGTAAAGCCTTAGCTCTGACTGTGGATGGCTTTCTTGGGCTTAGCAGCTAAACAT 2000
S G L S W S G H C K P . L S D C G W L S L A L A A N M
I W S L H G L V I S L S L T V D G F P W R . Q L T
I W S L H V W S L . A L A L . L W M A F L G V S S . H
GGTTACAGGATTTCAGTGAAAATTTAAATGTTGGGGGAAGGTGCGGACACACCATATAGGTCCCAATTCAAACAATCC 2080
V T G F H . K F K C W G K G A D T P . W S Q F K T I
W L Q D F T E N L N V G G K V R T H H N G P N S K O S
G Y R I S L K I . M L G E R C G H T I M V P I Q N N P
GTGAAACAGCCTCAAGTTAGGGGTGAGATGTTTTCAACCAAAGTAATTATCTTGACACCACAAAGCACACCTGTCTACAG 2160
R E T A S S . G . D V F E N O S N Y L D T T K H T G L O
V K O P Q V R G E M F S T K V I I L T P O S T P V Y R
N S L K L G V R E C F O P K . L S . H H K A H L S T
GCAGTGACTCCCCAAAAGCTATTAGACACACAACAGCATGACCATAACTCAGTGGATTGGCAAGGTACACAGTAGGAC 2240
A V T P Q K L L D T Q Q A . P . L S G L A R S H S R T
G . L P K S Y . T H N K H D H N S V D W Q G H T V G
G S D S P K A I R H T T S M T I T Q W I G K V T Q . D
TGCCCTTCACACAGTAGGTAGGAAAATGCTGCTGCTCACTGCTGTCACTGTTTATTTTGCATATCCCATGTTAAGATTAA 2320
A L H T V G R K M L L S L L S A V I L H I P C . D .
L P F T Q . V G K C C C H C C Q L L F C I S H V K I N
C P S H S R . E N A A V T A V S C Y F A Y P M L R L I
AAGGCAAAAATATTGTCTCTAAGTCTACTTCTGTTCCAAACTGGAGGAAATTATTGAATAAATAAACCTGCATATA 2400
K A K N I V S K S Y F L F Q T G G N Y . I N K P C I K
R Q K I L S L S P T F C S K L E E I I E . I N R A .
AGTAGCCTCAGAAAGGGTCAAAATTTCTGTTTTCTTTGAATATTAGCTGAGGCTCCAGGGGGGAGCACCAGGTAGAGA 2480
S S L R K G V O N L C F L . I L A E A S R G Q H Q G R E
V A S E R V K I C V F F S Y . L R P P G C S A P K V E
K . P Q K G S K F V F S L N I S . G L Q G A A P R . R
GCTGGACTAAGGCTGCTCTGTGTTCTGTCTCTGGGCTCCCCACAGCTCCCTTCACCACCACTCCCATTCATCCAACCT 2560
L D . G C S V F L S C W A P H S S L P P P L F F H P T
S W T K A A L C S C P G L P T A P P L H H H S H S I Q L
A G L R L L L C V P V L G S P Q L P S T T T T P I P S N F
TATTTTATAGCTGCCAGTGGGAGGGGGCAGGATAGGAGGGAAAGTAACGAAAACAGCCAAGGAGAGGGACAGAGCAACTCA 2640
L F L A A S G R G Q D R R E S N E N S Q K E G Q S N S
Y F . L P V G G G R I G K V T K T A K E R D R A T Q
I F S C Q W E G A A G C A G . E G K . R K Q P R R G T E Q L
GAGCCTCTCGGACTGGACCGGACAGCGCCCATCTCTCTCCATCCCTCACTGCTCCTGCCCTGGCGTGWGCTGA 2720
E P L G L D R T S A H G V S L H P S P A P A P G V A D
S L S D W T G Q A P M E S L S I P H L L L P L A 7 L
R A S R T G T P D K R P W S L S F S L T L C S P P W R ? .

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CAGGTGAGGGAAGCAAACCTTGGTTTCTGCTGGGAATGGAAGTTATGTGGATTGTTTATAATTGGGACCATTATGGCTAAA 2800
 R . G K Q T W F L L G M E V M W I V Y N W D H Y G .
 T G E G S K L G F C W E W K L C G L F I I G T I M A K .
 Q V R E A N L V S A G N G S Y V D C L L . L G P L W L K
 ATCTYGGGGCGCTCAGGTCCGAGGTTAATACCGATGCTATATTTCTGTGTGCACTCATGTTCTTAGACACCCAAATGG 2880
 N L A G A O V G G . Y R C Y I S C V H S C S . T P K W
 I ? R A L R S E V N T D A I F P V C T H V L R H P N G
 S ? G R S G R R L I P M L Y F L C A L M F L D T Q M
 CAGTGGCCAAAACCTTCTCTGGCTTGTACCTCATTATCTAAACCTTTGTACCTAATTATCTAAAACCTTGGTCCCTAAACT 2960
 Q W P K L P L A C T S L S K P L Y L I I . N L G F K L
 A V A K T S S G L Y L I I . T F V P N Y L K P W S . T
 CCACAGACATGAGGGCAGAGAAAAGAGACGTGTCTCTCATCTTCCATTGGTTACACTGATTCCCTACCTTCCCTGCTTCT 3040
 H R H E G T E K R R V S H L P F G Y T D S Y L P C F
 S T D M R A Q K R D V S L I F H S V T L I P T F P L S
 F Q T . G H R K E T C L S S S I R L H . F L P S L L L
 CCCTGCTATTGGTGTCTCTGGTGGCTGAGGCATAATTGCCTTACTATGTGGTCAGAAGCTCTGGGTTCCGCTAACGACCG 3120
 S L P L V L L G A . G I A L L C G Q N S G F A . R P
 P C H W C S L V P E A . L P Y Y V V R T L G S P N D R
 P A I G A P W C L R H N C L T M W S E L W V R L T T
 AGCTACAGTTTCTGGTCTCATAGCCCTGCCAATTTCTGGATTAAAAAAGGCTCACATATAAAATACCTTTTCTGA 3200
 S Y S F W S H S P A N F L D . K K K A H I . N T F S E
 A T V S G L I A L P I S W I K K K R L T Y K I P F L
 E L O F L V S . P C Q F P G L K K K G S H I K Y L F .
 AAATGAGCACAGTGTGAGTTGAAGTTAGATTTTGGGGGATGGAGGGTTGCTTGGATGCAAAGAGCAAGACAGTAGAGAAG 3280
 N E H S V S . S . I L G D G G L L G C K E Q D S R E
 K M S T V . V E V R F W G M E G C L D A K S K T V E K
 K . A Q C E I K L D F G G W R V A W M Q R A R Q . R R
 AGAATCATGGGAGGATAAGAGGCTGGAATTTTCCCTGCTAGTGCCCTATAATCTTTGTTTCTAAAATAACAGCTCTG 3360
 E N H G R D K R L E F F P A S A L . S L F P K I T A L
 R I M G G I K G W N F S L L V P Y N L C F L K . Q L .
 E S W E G . E A G I F P C . C P I I F V S . N N S S
 ATTTTATGGGAATTGGGGTCAGGAGAAAAGGAATCAGTAGGCACAGATGGGACCCCAAGCGTGGACTAAAGTTTGAGGAAA 3440
 I L W E L G S G E R N O . A Q M G P Q A W T K V . G N
 I F Y G N W G Q E N G I S R H R W D P K R L K F E E
 D F M G I G V R R K E S V G T D G T P S V D . S L R K
 CTATGGGAGTAGGCAAGGGGTGTTTGAAGGTGGATGAGATGAGGAGATTGTGTGCGGGGGAGTCTTGGGGGTGATAGG 3520
 Y G S R Q G V F V R W M R . G D C G G G E S W G .
 T M G V G K G C L . G G . D E E I V V G G S L G G D R
 L W E . A R G V C K V D E M R R L W W G G V L G V I G
 ACCCTTAACAGGGATAGATGGCAAACCTGTGTGTGGGCAAGCCGGTGGTTCCACCCACTTAATTAGCGTTGAGGTTGGCAG 3600
 D P . Q G . M A N C V W A G R W F H P L N . R . G W Q
 T L N R D R W Q T V C G G Q A G G S T H L I S V E V G R
 P L T G I D G K L C V G R P V V P P T . L A L R L A
 GGCTGGAAGGAGCCAGCACTCTCAACCTTGGAGAAAGTGCAAGTGTGACAAGAAGAAACAGAAAGAGGAGACACCCGGGC 3680
 G W K E P A L S T L E K V Q V . Q E E T E R G D T R A
 A G R S Q H S O P W R K C K C D K K K Q K E E T P G
 G L E G A S T L N L G E S A S V T R R N R K R R H P G
 AGGGAGCTCCTTGCCATCGTTTCTTCCATGGCCCTGGCTTTGGGAAGAATTAGGAAAGGGTGGTGAATCTGCATCCTCA 3760
 G G S L P S F L P M A L A L G R I R K G W . L C I L
 Q G A P C H R F F P W P W L W E E L G K G G D S A S S
 R E L L A I V S S H G P G F G K N . E R V V T L H P Q
 GAAAAGCCCTCTCTCCCTCTTTGGACTCTCGAGGCTTAGAGAGGAGAATGTGTAGGAGGAATGATGTGGAAGAGTAAC 3840
 R K A L S P S L D S R G L R M C R R N D V E R V T
 E K P S L P L W T L E A . R G E C V G G M M W K E . L
 K S P L S L F G L S R L R E E N V . E E . C G K S N
 TGACCTATCCAGATGTCTGTGAATGAGATTTAGGAATGAGAATGGAATACAGCTGTGCTTACAGCATGCCCGAGGGC 3920
 . P I O M C L . M R F Q E . E W K Y S C A S A W P R A
 D L S R C V C E . D F R E N G N T A V L Q H G R G
 L T Y P D V S V N E I S G M R M E I Q L C F S M A E G
 CTTAGGATCCCTCACCCCCACCCACAGGAAGAGAATCATCCAATCATCCACCTGGGGTTCTGAGGACATGACATTGAC 4000
 L G S L T P T P Q E E N H P I I P P G V L R T . H .
 P . D P S P P P P H R I I Q S S H L G F . G H D I D
 L R I P H P H P T G R E S N H P T W G S E D M T L T
 ACAGAGCAGGAGAGCTGAGATAGAAACACTCCCTCCTGTCTGTCTCCACTAAGCCTCACCAGTCTTCAATTAAGTGAT 4080
 H R A G E L R . K H S L L S C L P L S L T S P S L T D
 T E Q E S . D R N T P S C L V S H . A S P V L H . L I
 Q S R R A E I E T L P P V L S P T K P H Q S F I N .

FIGURE 15c

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TGGTGGATGCTAATTATGATCCTCACCCCTCAGGTCTCTGCTCCCCCTTTAATCTGGATGAACACCACCCAGACTCTTC 4160
W W M L I M I L T P Q V S A F P L I W M N T T H D S S
G G C . L . S S P L R S L L P L . S G . T P P T T L
L V D A N Y D P H P S G L C S P F N L D E H H P R L F

ACAGGGCCACCCAGAGGCCGAATTTGGATACAGTGTCTTACAGCATGTTGGGGGTGGACAGCGATCGTGAGAGGGGAAACA 4240
Q G H O R P N L D T V S Y S M L G V D S D G E R E N
H R A T R G R I W I Q C L T A C W G W T A M V R G K Q
T G P P E A E F G Y S V L O H V G G G Q R W . E G K Q

GAGGACCGTGGGATCGGACTATGCACTCACTGATAAAGGGGAGGACCGGTCCAAGCTGGCCTTTGAAAGTGCCCTGGGGC 4320
R G P W D R D Y A L T D K G E D R S K L A F E S A W G
E D R V G I G T M H S L I K G R T G P S W P L K V P G A
P T V G S G L C T H . . R G G P V Q A G L . K C L G

TCCATGACGTCTCATGCACTCTCCCTCTCACTATACTAAGGACCATGCTCACCGGATCTTTATATCATATTCTCCTTCC 4400
S M T S H A L S L S L Y . G P C S P D L Y I H I L L P
L H D V S C T L P L T I L R T M L T G S L Y P Y S P S

AGGATGCTGGTGGGTCGCCCTGGGATGGGCCATCAGGTGACCGGAGAGGGGATGTTTATCGTTGCTCTATAGGGGGATT 4480
G C W W V P P G M G H Q V T G E G M F I V A L . G D
Q D A G G C P L G W A I R . P E R G C L S L L Y R G I
R M L V G A P W D G F S G D R R G D V Y R C S I G G F

CCACAGTGCTCCATGTACCAAGGCCACCTGGGTAAGAAGAAGCGTGACCTTTCCCTGCTAATTCCTGATGTTGACATC 4560
S T V L H V P K A T W V R R S L T F P L L I P D V D I
P Q C S M Y Q R P P G . E E A . P F P C . F L M L T S
H S A P C T K G H L G K K K P D L S P A N S . C . H

TAGTAAGTCTGACCCCTTGGACCTTGTCTTCAATGACCGTGAAGTAAAGAAGCGGAAGTATGACCCCATGACTTCATTCT 4640
L . P L G P C L Q . P . T K E A E L . P H D F I L
L N S D P L D L V F N D P E L K K P N Y D P M T S F
L V T L T F W T L S S M T L N . R S R T M T P . L H S

CTTCTACCCCTTCTCCAACCGGTGACTATCAACTTGGAAATTCCTCTCAGCCTGCTGTGAATATGCACCTAGGGATGTC 4720
F Y P S S N Q V T I N L E I P L S L L . I C T . G C
S S T L P P T R . L S T W K F L S A C C E Y A P R D V
L L P F L Q P G D Y Q L G N S S Q P A V N M H L G M S

TCTACTAGACAGATGCTGATGGGGATTCTGCTGAGCTGAAGAAGGGGCTCAGAAGGTTTACAGCAGGGAAGAGAG 4800
L Y . R Q M L M G D S W . A E R R A S E G S Q Q G R E
S T R D R C . W G I H G E L K E G P Q K V H S R E E S
L L E T D A D G G F M V S . K K G L R R F T A G K R

CATTATGGTATCTGGGCAGTGGTGGCTTGGGCCCTTTCATCCAGTGTTCTGGAGGCAGAGTCAGGCCTGATCTACAGAGT 4880
H Y G I W A V V A W A F H P S V L E A E S G L I Y R V
I M V S G Q W W L G P F I P V F W R Q S Q A . S T Q S
A L W Y L G S G L G L G L S S Q C S G R V R P D L Q S

GAGCTCCAGGACAGCCAAAGGCTATGCAGAGAAACCTGTTTTGAAAAACCCAAACCAAACTAACCAACAACAACAAC 4960
S S R T A K A M O R N P V L K N P K P K L T K Q Q Q
A P G Q P R L C R E T L F F . K T O N O N . P N N N
E L Q D S Q G Y A E K P C F E K P K T K T N Q T T T T

AGAAAAAGCACCGTGGTAAGGGAATAGTCTGTATAGAAGAGACAAGGAATTCAAAACCTAGAGAGCAAGGCAGGGTT 5040
Q K K H R G K G N . S V . K R O G I O N P R E O G R V
R K S T V V R E I S L Y R R D K E F K T L E S K A G F
E K A P W . G K L V C I E B T R N S K F . R A R Q G

CCCCATGGAGTGGTCTCATCTCTCTTTAACTAGGTGTGTGTTCCGAGAGGCCCTCTCAAGCCTGGGGATAACTATTTC 5120
P H G V V S I S L L T R C V F R E A L S S L G I T I S
P M E W S P S L F . L G V C S E R P S Q A W G . L F
S P W S G L H L S F N . V C V P R G P L K P G D N Y F

TCCTATCCACCCAGGCCTGTGCCCCCTTTGGTCTCGTGGCCTGCGGCAGCTCTGTCTTCAGTTCTGGAATATGTGCCCGT 5200
P I H P G L C F S L V S C L R Q L C L Q F W N M C P
L L S T Q A C A P L W S R A C A S S V F S S G I C A R
S Y P P R P V P L F G L V P A A A L S S V L E Y V P V

GTGGATGCTTCATTCCGGCCCCAGGGAAGCCTGGCACCCACCGCCCAACGTGAGCCAGTGAAGGGCCCTGGAAGCTCAG 5280
C G C F I F A P G K P G T H R P T . A S G R A L E A Q
V D A S F R P Q G S L A P T A Q R E P V E G P W K L S
W M L H S G P R E A W H P P P N V S Q W K G P G S S

TTCCAGATAGGGATGCTGGGTGGGAAAACTAGGACAAAGACTTGGTGGAGGGTCTGCATGGCTATCCTCATCATTCCC 5360
F P D R D A G W E K L G O R L G G G S A W L S S S F F
V F R . G C W V G K N . D K D L V E G L H G Y P H H S
V F R . G C W V G K T R T K T W W R V C M A I L I I P

AAGTGTGCTTGCAGAAGAGGCTCCTGTTTGCTAACTGATTAGAATTGAGACTCCTTAGGAGAGCCTCAAGACACCGAGT 5440
S V L A E E A P V C . L I R I Q T P . E S L K T P G
Q V C L O K R L A N . L E F R L L R R A S R H Q D
K C A C R R G S C L L T D . N S D S L G E P Q D T R I

FIGURE 15d

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CTGGTTTTACCAACTTAAAAACAAAACAAACAGCATATCCTGTGCACAGCCTATCCCTCATCCATCAGGTGTCCTCCAT 5520
 S G F T N L K T K Q N S I S C A Q P I P H P S R V L H
 L V L P T . K Q N K T A Y P V H S L S L I H H V S S I
 W F Y Q L K N K T K Q H I L C T A Y P S S I T C P P

ATCTTATTTTTGTGGGTCTTATAGATGCCAAGTCAGCACTCAGTTATTGGGTTCTCCCTCATGCCCTTTCATATACTTTC 5600
 I L F L W V L . M P S Q H S V I G F S P H A F H I L S
 S Y F C G S Y R C Q V S T Q L L G S P L M P P I Y F
 Y L I F V G L I D A K S A L S Y W V L P S C L S Y T F

TTATCTACTGCCCTTTTGGGAGATAGTCTTATGTAGCCAGGCTGTCTTGATCTTGGAAATTTGCTTGCCCTCAGCTTCTCA 5680
 Y L L P F G R . S Y V A Q A V L D L G I C L P Q L L
 L I Y C L L G D S L M . P R L S L I L E F A C L S F S
 L S T A F W E I V L C S P G C P . S W N L L A S A S Q

GTCTCAAGTACTGGGATAATAGGCATGCATTGTCTGCTGGCCTTTGCTGAACATGCCCTCTGTGGCCATTGGTAGGGCA 5760
 S L K Y W D N R H A L S A W P L L N M P S V A I G R A
 S S T G I I G M H C L P G L C . T C P L W P L V G H
 S Q V L G . . A C I V C L A F A E H A L C G H W . G

TGAGTCAAATACTGCCCTCCCCCACAACACACACAAACGAAAGTGAGGCTCTCTAAGTGTTCATAGCACAGGGTAGT 5840
 . V K Y C P P P P Q H T H K R K . G S L S V P . H R V V
 E S N T A L P H N T H T N E S E A L . V F P S T G .
 M S I L P S P T T H T Q T K V R L S K C S I A Q G S

GGTAGGCTCTCGCTAGTGCATATTTCTTTTACTCTGCCCATCTCTTCTTTCTTTGATTCCACACTGGGACCTG 5920
 V G L S L V H I S F F Y S A H L F F L . F P H W G F
 W . A S R . C I F H S F T L P I S S S F F D F H T G D L
 G R P L A S A Y F I L L L C P S L L S L I S T L G T W

GCATAGTACTTTCTGGTAATTAAGAGAGAATTCCCTTTTAAAGTGCTGCATTGCAGCGTCTCTGGGACATTCTCCCT 6000
 G I V L S W . L R E N S L L S A C I A A S S W D I L P
 A . Y F P G N . E R I P F . V P A L Q R P P G T F S L
 H S T F L V I K R E F P F K C L H C S V L L G H S P

TGCTGACTACACCCACATCCTTCCATGTTTTTGTTTCCCATCACTATGCCCCCTTCTAGGCTGTCCACATACATGG 6080
 C . L H F T S F H V F C F P S L C P P S R L S H I H G
 L A D Y T P H I L P M F F V S H I T M P P F . A V F H T W
 L L T T P H I L P M F F V S H I T M P P F . A V F H T W

ATGTCGTTCATTGTTTTGGATGGCTCCAACAGTATCTATCCCTGGTCAGAAGTTCAGACTTTCTCTCGGAGGCTGGTAGGA 6160
 C K H C F G W L Q Q Y L S L V R S S D F P S E A G R
 D V V I V L D G S N S I Y P W S E V O T F L R R L V G
 M S S L F W M A P T V S T P G Q K F R L S F G G W . S

AGACTGTTTCATCGATCCGGAGCAGATACAGGTAAGAGAAAGATATGTGGATAGGATTGGAGGGAAAGTAACACTCC 6240
 K T V H R S G A D T G K R K I C G . D W R E R S K H S
 R L F I D P E Q I Q V R E R Y V D R I G G K E V N T P
 D C S S I R S R Y R . E K D M W I G L E G K K . T L

TGGACCTTGGATGTAAGCAGCATGTCCAGCCTCTTGATGACACCTGGGACATTGTCTTCTACAGAACTCATGCTCAA 6320
 W T L G C K Q P C P A S . H P G T L S S T E L M L K
 G P L D V S S H V Q P L D D T L G H C L L O N S C S
 L D P W M . A A M S L L M T P W D I V F Y R T H A Q

GAAGTGTGCAATTAACCTTACCAAAAAGTCACAAAAATTTATAATGTTTGAAGTAAGTTTATGATTGTGTGGGGGCCAC 6400
 N C A I N L P K S H K N F I M F E V S L . L C G G P
 R T V Q L T Y Q K V T K I S . C L K . V Y D C V G G P
 E L C N . L T K K S Q K F H N V . S K F M I V W G A T

ACTCAGAGCTTCCCTTTGCTGCTTGTAGTTGCTTGGGCAATGCATGCCATGAGCTGCAAGTTAGACACACCTGTTCACTT 6480
 H S E L P F A A C S C L G N A C H E L O V R H T C S L
 T Q S P L L L V V A W A M H A M S C K L D T P V H F
 L R A S L C C L . L L G Q C M P . A A S . T H L F T

CCCTTCATCGTGTGCAGGTTGGACACACCTGTTAGGGGTTCACTTCCCTTCATCCTTTGTGCTCCATCTTCTCTACG 6560
 P L H R A A A G W T H L L G V H F P F I L C A P S S L R
 S P S S C C R L D T P V R G S L P L H F L C S I F S T

CTCTTCATACATCCCATGTGGGCACATGGTCTATTGTTCTCAGGTAGGACTGGTACAGTACGGGGAGAACCCCTGTGCATG 6640
 S S Y I P C G H M V Y C S Q V G L V Q Y G E N P V H
 A L F I H F M W A H G L L F T S G R T G T V R G E P C A .
 V G L V Q Y G E N P V H

AGTGGTCCCTGGGAGACTTCCGAACAAAGGAAGAAGTTGTGAGAGCAGCAAGGAACCTAAGTCGGAGGGAAGGGCGAGAA 6720
 E W S L G D F R T K E E V V R A A R N L S R R E G R E
 S G P W E T S E Q R K K L . E Q Q G T . V G G K G E R K
 V V P G R L P N K G R S C E S S K E P K S E G R A R

ACGAGAACCAGCCCAAGCGATCATGGTGGCATGGTGGAGACATTGTAAAGGGTCTGTGTAGGGAGGAGGAAGGATCAGCAG 6800
 T P T A Q A I M V A W . D I V K G S C E G G G R I S R
 R E P P P K R S W W H G E T L . R G R V R E E E G S A
 N E N R P S D H G G M V R H C K G V V . G R R K D Q Q

FIGURE 15e

[illegible]

FIGURE 15f

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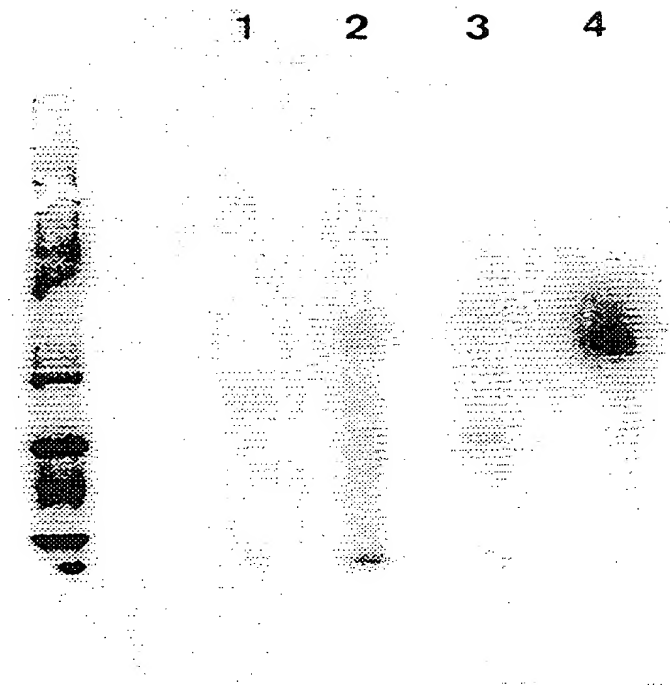


FIGURE 16

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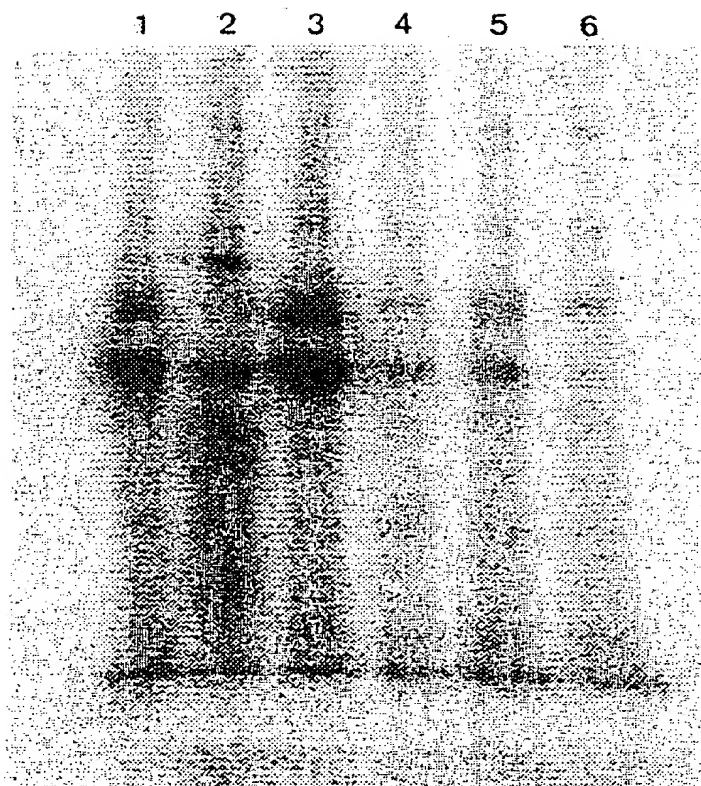


FIGURE 17